

4.12 ENVIRONMENTAL JUSTICE

4.12.1 Environmental Setting

Area of Effect and Community of Comparison

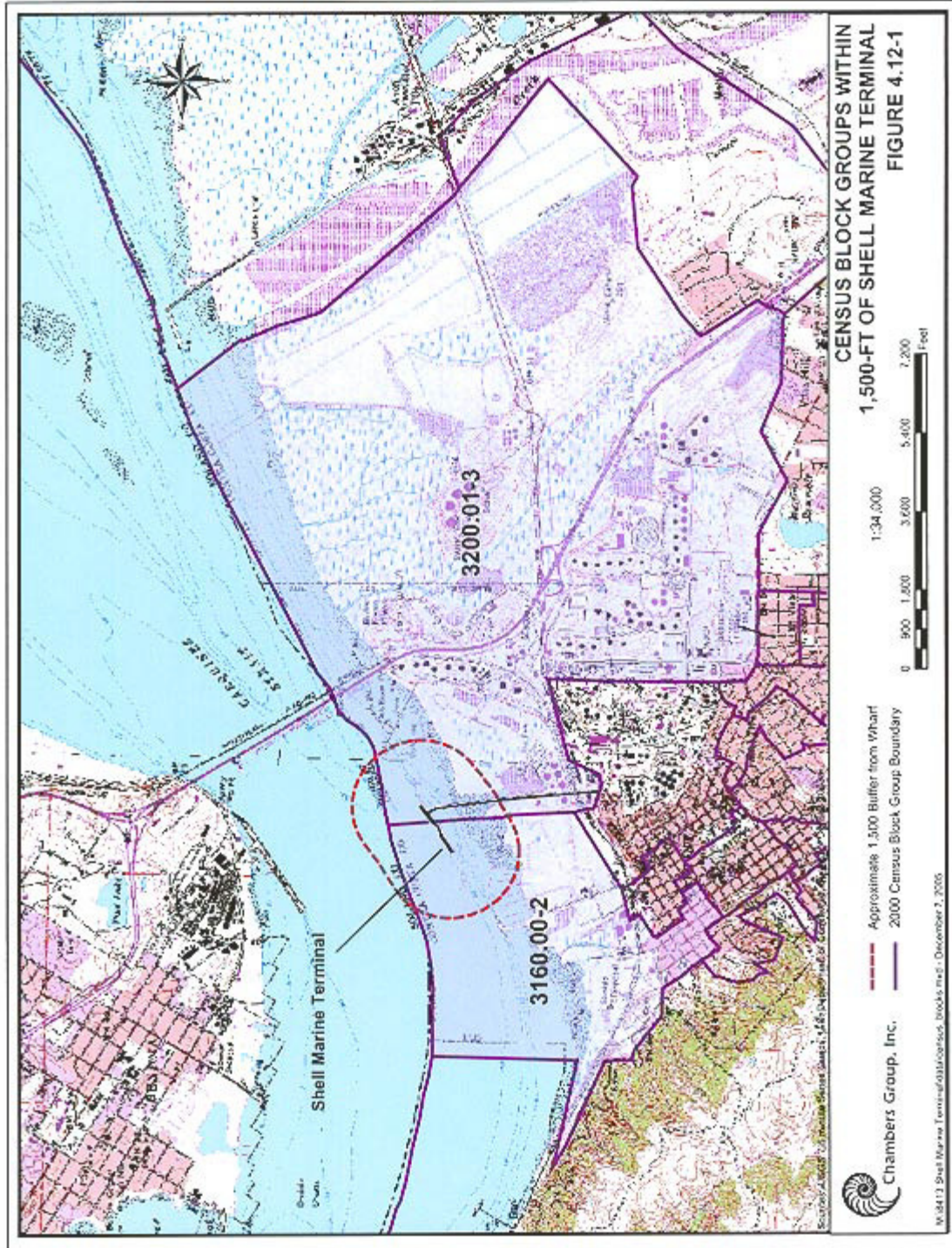
The Project study area used for the Environmental Justice analysis is the “hazard footprint” area, as determined in Section 4.1, Operational Safety/Risk of Accidents. From that section, a hazard footprint of 1,500 feet was calculated to be the area at risk if a fire or explosion were to occur at the Shell Terminal. In addition, the Shell Terminal does not transfer any products that would produce gas cloud hazard footprints that would cause health and safety risks to the public. Portions of two census block groups (3160, 3200.01) were determined to be within this radius, and demographic data from the two block groups was used as the study area for this analysis (see Figure 4.12-1).

According to the U.S. EPA’s “Final Guidance for Incorporation of Environmental Justice Concerns in EPA’s NEPA Compliance Analyses” (April 1998), a minority or low income community is disparately affected when the community will bear an uneven level of health and environmental effects compared to the general population. Further, the guidelines recommend that the Community of Comparison that is selected be the smallest governmental unit that encompasses the impact footprint for each resource. Although the Shell Terminal is located on state tidelands under the jurisdiction of the CSLC, the 1,500-foot hazard footprint extends within the area of influence of the city of Martinez and within land under the jurisdiction of Contra Costa County which were defined as the Communities of Comparison for this analysis.

Study Area Demographics

As stated above, the study area, or the area of affect from potential hazards occurring at the Shell Terminal, is located in two census tracts: 3160 and 3200.01. The year 2000 study area population was 4,900, 30 percent of which is considered to be of a minority race (see Table 4.12-1). The largest percentage minority group within the study area was “some other race alone” category, which included 540 persons or approximately 11 percent of the total study area population for the city of Martinez. The “some other race” category includes all other census responses not included in the “White,” “Black or African American,” “American Indian and Alaska Native,” “Asian,” and “Native Hawaiian and Other Pacific Islander” race categories (U.S. Census Bureau 2003a). Census respondent write-in entries, such as Hispanic/Latino, were included in this category and are believed to constitute the majority of the “some other race” category within the Project study area. In comparison, the city of Martinez and Contra Costa County had total minority group population ratios of 18.9 and 34.7 percent, respectively.

Figure 4.12-1 – Census Block Groups Within 1,500-Feet of Shell Marine Terminal



**Table 4.12-1
Race Characteristics 2000**

Race	Project Study Area	City of Martinez	Contra Costa County
White	3,412	29,064	619,576
Black or African American	431	1,201	87,444
American Indian and Alaska Native	62	264	5,501
Asian	148	2,378	103,198
Native Hawaiian and Other Pacific Islander	10	84	3,391
Some other race alone	540	1,181	77,521
Two or more races	296	1,694	52,185
Minority Subtotal (percent of total)	1,488 (30.3)	6,802 (18.9)	329,240 (34.7)
Total	4,900	35,866	948,816
Sources: U.S. Department of Commerce, Census Bureau 2003a, U.S. Department of Commerce, Census Bureau 2003b,			

As an added measure to ensure that study area minority populations are adequately identified, census data was gathered for Hispanic origin. Hispanic is considered an origin, not a race, by the U.S. Census Bureau. An origin can be viewed as the heritage, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States (U.S. Census Bureau 2003c). People that identify their origin as Spanish, Hispanic, or Latino may be of any race. Therefore, those who are counted as Hispanic are also counted under one or more race categories, as described above. Approximately 21.3 percent of the study area population was Hispanic in origin (Table 4.12-2). In contrast, the City of Martinez and Contra Costa County had a 10.2 percent and 17.7 percent Hispanic population, respectively.

**Table 4.12-2
Hispanic Origin 2000**

	Hispanic in Origin	Total Population	Percent Hispanic
Project Study Area	1,045	4,900	21.3%
City of Martinez	3,660	35,866	10.2%
Contra Costa County	167,776	948,816	17.7%
Source: U.S. Department of Commerce, Census Bureau 2003c			

As shown in Table 4.12-3 below, 301 persons within the study area were determined in 1999 to be below the poverty level. This represents approximately 6.1 percent of the population within the study area. The city of Martinez and Contra Costa County had percentages of 5.1 percent and 2.4 percent, respectively, of their population determined to be below the poverty level.

**Table 4.12-3
Study Area Population Poverty Status in 1999**

	Population Determined Below Poverty Level in 1999	Total Population	Percent of Population Determined Below Poverty Level in 1999
Project Study Area	301	4,900	6.1%
City of Martinez	1,826	35,866	5.1%
Contra Costa County	22,738	938,310	2.4%
Source: U.S. Department of Commerce, Census Bureau 2003b			

Census poverty thresholds are the same for all parts of the Country and are updated yearly to reflect changes in the Consumer Price Index. However, due the high cost of living in the Bay Area, a higher poverty threshold was used to characterize the number of low-income households. As part of their 2001 Regional Transportation Plan Equity Analysis and Environmental Justice Report, the Metropolitan Transportation Commission (MTC) used the criterion of 30 percent of households at or below 200 percent of the poverty level. The 2001 MTC study identified communities that have high population of low-income residents. The City of Martinez was identified as containing a low-income community zone (central Martinez) with 37.2 percent of the population within the zone at or below 200 percent of the poverty level¹ (MTC 2001).

4.12.2 Regulatory Setting

Federal

On February 11, 1994, President Clinton issued an "Executive Order on Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" designed to focus attention on environmental and human health conditions in areas of high minority populations and low-income communities, and promote non-discrimination in programs and projects substantially affecting human health and the environment (U.S. EPA, 1994). The order requires the EPA and all other federal agencies (as well as state agencies receiving federal funds) to develop strategies to address this issue. The agencies are required to identify and address any disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and/or low-income populations.

¹ Analysis based upon 1990 Census data

In 1997, the U.S. EPA's Office of Environmental Justice released the *Environmental Justice Implementation Plan*, supplementing the EPA environmental justice strategy and providing a framework for developing specific plans and guidance for implementing Executive Order 12898. Federal agencies received a framework for the assessment of environmental justice in the EPA's *Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analysis* in 1998. This approach emphasizes the importance of selecting an analytical process appropriate to the unique circumstances of the potentially affected community.

While many state agencies have utilized the EPA's *Environmental Justice Implementation Plan* as a basis for the development of their own environmental justice strategies and policies, as of yet the majority of California state agencies do not have guidance for incorporation of the environmental justice impact assessment into CEQA analysis. The State Air Resources Board has, for example, examined this issue and has received advice from legal counsel, by a memorandum entitled "CEQA AND ENVIRONMENTAL JUSTICE." This memorandum states, in part, "For the reasons set forth below, we will conclude that CEQA can readily be adapted to the task of analyzing cumulative impacts/environmental justice whenever a public agency (including the Air Resources Board, the air pollution control districts, and general purpose land use agencies) undertakes or permits a project or activity that may have a significant adverse impact on the physical environment. All public agencies in California are currently obliged to comply with CEQA, and no further legislation would be needed to include an environmental justice analysis in the CEQA documents prepared for the discretionary actions public agencies undertake."

State

Under AB 1553, signed into law in October 2001, the Governor's Office of Planning and Research (OPR) is required to adopt guidelines for addressing environmental justice issues in local agencies' general plans. The OPR updated the General Plan Guidelines in October 2003 to incorporate the requirements of AB 1553.

California State Lands Commission Policy

The CSLC has developed and adopted an Environmental Justice Policy to ensure equity and fairness in its own processes and procedures. The CSLC adopted an amended Environmental Justice Policy on October 1, 2002, to ensure that "Environmental Justice is an essential consideration in the Commission's processes, decisions and programs and that all people who live in California have a meaningful way to participate in these activities." The policy stresses equitable treatment of all members of the public and commits to consider environmental justice in its processes, decision-making, and regulatory affairs which is implemented, in part, through identification of, and communication with, relevant populations that could be adversely and disproportionately impacted by CSLC projects or programs, and by ensuring that a range of reasonable alternatives is identified that would minimize or eliminate environmental impacts affecting such populations. This discussion is provided in this

document consistent with and in furtherance of the Commission's Environmental Justice Policy. The staff of the CSLC is required to report back to the Commission on how environmental justice is integrated into its programs, processes, and activities (CSLC 2003).

Regional and local environmental justice assessments have been performed by agencies within the study area, such as the Bay Area MTC *2001 Regional Transportation Plan Equity Analysis and Environmental Justice Report*. Methods applied in this Draft EIR analysis are consistent with those used in the MTC report.

This section analyzes the distributional patterns of high-minority and low-income populations on a regional basis and characterizes the distribution of such populations adjacent to the proposed and alternative pipeline corridors. This analysis focuses, in the main, on whether the proposed Project's impacts have the potential to affect area(s) of high-minority population(s) and low-income communities disproportionately and thus create an adverse environmental justice impact.

4.12.3 Impact Significance Criteria

A disproportionate effect on a minority or low-income population would occur if:

- The affected census block group is located within an MTC identified Minority Zone (areas having minority populations of 70 percent or more) or Areas of Poverty (areas having 30 percent of households with 1989 incomes at or below 200 percent of the poverty level) and that group will be subjected to a significant impact (Class I) (from other resource disciplines).
- The affected census block group has a minority or Hispanic origin population that is either greater than the Community of Comparison percentage or greater than 50 percent, and that group will be subjected to a significant impact (Class I) (from other resource disciplines).
- The affected census block group has a percentage of low-income (below 1999 poverty level) households that is either greater than the Community of Comparison percentage or greater than 50 percent, and that group will be subjected to a significant impact (Class I) (from other resource disciplines).

A significant adverse impact was also considered to have a disproportionate effect on a minority or low-income population if the impact would clearly effect these populations, even if they do not reside in the affected census block groups. For example, the loss of a Native American cultural site would clearly affect this population disproportionately, even if the members of that Native American group do not reside in proximity to the cultural site. Another example would be the removal of a business or facility serving a

minority or low-income community that could not be relocated within an area with similar access and where alternative businesses or facilities are not available to meet the same needs of the minority or low-income population.

4.12.4 Impacts Analysis and Mitigation Measures

Methodology

Significant adverse impacts of the proposed Project and alternatives, as identified in other sections of this Draft EIR, have the potential to result in significant adverse Environmental Justice impacts if a disproportionate amount of minority or low-income populations may be affected. A two-step process has been conducted to identify potential impacts. First, areas within the study area containing minority or low-income populations that may be disproportionately affected are identified using MTC and Council of Environmental Quality Guidance.

MTC's 2001 Regional Transportation Plan Equity Analysis and Environmental Justice Report identified areas within the MTC planning area that had high minority and low-income population percentages. According to MTC criteria, areas with high percentages of minority populations (Minority Zones) were those having minority populations of 70 percent or more, while areas having 30 percent of populations with 1989 incomes at or below 200 percent of the poverty level were considered low-income areas (Areas of Poverty). To determine whether the areas surrounding the Shell Terminal are located within areas meeting MTC's criteria, Minority Zone and Areas of Poverty maps from MTC's Environmental Justice report were reviewed and compared to study area census block group boundaries.

The CEQA's Environmental Justice Guidance under the NEPA, December 10, 1997, states, "Minority populations should be identified where either (a) the minority population of the affected area exceeds 50 percent or (b) the population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of analysis." Using these criteria, demographic data for each study area census block group were compared to demographic data from each appropriate Community of Comparison to determine whether that specific block group had a "meaningfully greater" percentage of minority or low-income population.

Once areas were identified, the second step of the process evaluated all significant, unmitigated adverse effects identified for the proposed Project and alternatives to determine whether project impacts would have a disproportionate environmental impact on a minority and/or low-income population. Impacts for each resource are only generally discussed, and specific information on impacts should be drawn from the appropriate Draft EIR section.

Impact EJ-1: Environmental Justice Impacts Associated with Continued Operation of the Shell Terminal

Overall, Project impacts would affect resources used by the entire Bay community, whether or not they are minority or low-income, and would therefore not have a disproportionate impact on a minority or low-income population. Environmental Justice impacts are considered less than significant (Class III) for all except shrimp and sport fisheries, which are Class II.

MTC Minority Zone and Areas of Poverty

The review of MTC maps found that neither of the study area census block groups are located within an area identified as having a minority population of 70 percent or more; however, census block 3160 is identified as an area with 30 percent of the population having incomes at or below 200 percent of the poverty level. Therefore, the proposed Project's significant adverse impacts identified in other sections of this Draft EIR within the study area could have an effect on an MTC-identified Minority Zone or Areas of Poverty.

Areas with Meaningfully Greater Minority or Low-Income Populations

To determine whether the study area census block groups have meaningfully greater minority or low-income populations, minority and low-income percentages in each census block group were compared to those of the Communities of Comparison. As shown in Table 4.12-4 below, census block groups 3160 and 3200.01-3 (the study area) have minority, of Hispanic origin, and low-income population percentages that are greater than the corresponding percentages for both the city of Martinez and Contra Costa County. Therefore, the study area was determined to have meaningfully greater minority, Hispanic origin, and low-income populations.

Based upon the analysis conducted for this Draft EIR, significant adverse impacts resulting from the routine operation of the Shell Terminal include Operational Safety/Risk of Upset, Water Quality, Biological Resources, Commercial and Sport Fisheries, Land Use, Noise, Visual, and Geotechnical/Structural Impacts. Overall, those impacts would effect resources used by the entire local community regardless of whether they may be minority, of Hispanic Origin, or low-income, and therefore, no portion of the community would be affected disproportionately. In addition, because the Shell Terminal hazard footprint area, as discussed in Section 4.12.1, does not include population segments identified as an MTC-Minority Zone and Areas of Poverty, or an area of Meaningfully Greater Minority or Low-Income Population, no impact resulting from the proposed Project would have a disproportionate effect on a minority or low-income population.

Table 4.12-4
Study Area Census Block Groups with Meaningfully Greater
Minority, Hispanic Origin, or Low-Income Populations

	Study Area Census Block Groups		City of Martinez	Contra Costa County
	3200.01-3	3160		
Minority				
Percent	24.0%	43.39%	18.9%	34.7%
Exceeds Criteria? ¹	Yes	Yes		
Hispanic Origin				
Percent	24.2%	15.7%	10.2%	17.7%
Exceeds Criteria? ²	Yes	Yes		
Low-Income				
Percent	22.0%	38.4%	5.1%	2.4%
Exceeds Criteria? ³	Yes	Yes		
Source: U.S. Department of Commerce, Census Bureau 2003b ¹ Census block group has a population percentage of minority residents that exceeds the percentage of the Community of Comparison or is greater than 50 percent. ² Census block group has a population percentage of Hispanic origin residents that exceeds the percentage of the Community of Comparison or is greater than 50 percent. ³ Census block group has a population percentage of low-income residents that exceeds the percentage of the Community of Comparison or is greater than 50 percent.				

The findings in Section 4.4, Commercial and Sport Fisheries, indicate that the continued operations at the Shell Terminal could result in significant adverse impacts to fish and habitat, shrimp fisheries, herring fisheries and sport fisheries as a result of an oil spill at the Shell Terminal or from transiting tankers that visit the Shell Terminal. Spills could occur from vessel in transit in central and north San Francisco Bay, San Pablo Bay and the Carquinez Strait. Fishing access points, launch ramps and marinas may be threatened or closed. Overall impacts to fisheries would affect resources used by the regional community, whether or not they are minority, Hispanic origin, or low-income.

With regard to local sport fisheries, a 0.5-mile buffer around the Shell Terminal excludes less than 5 percent of the sport boat fishing area in block CDFG 308 and no shoreline fishing occurs within 0.5 mile of the Shell Terminal. Therefore, due to limited sport fishing near the Shell Terminal, impacts to study area census block groups (3160, 3200.01) would not be considered disproportionate, even though the census block groups have greater minority, Hispanic Origin, and low income populations.

However, should the spill affect areas beyond the 0.5 mile buffer, the potential exists for fisheries resources and fishing locations used by populations within the study area for subsistence fishing to be adversely affected as described in Impact FSH-9. Preclusion of affected populations from fishing areas over an extended period of time could be considered disproportionate, particularly if such populations do not have the ability to go to uncontaminated areas nearby and depend on fishing as a food source.

Mitigation Measures for EJ-1:

- EJ-1.** Should an oil spill from the Shell Terminal extend beyond 0.5 mile from the Terminal and preclude subsistence fishing by members of minority and/or low income communities for more than two days, Shell shall contribute either funds or food stuffs to a local food bank in an amount sufficient, as determined in conjunction with the CSLC, to replace food sources that would have been supplied by fishing activities within the affected areas.

Rationale for Mitigation: By contributing funds of food to a local food bank, Shell would be providing its fair share of mitigation to the affected community. Impacts would be reduced to less than significant.

4.12.5 Impacts of Alternatives

Impact EJ-2: No Project Alternative

Following cessation of operations at the Shell Terminal, there would be no potential for tanker spills at the Shell Terminal, and no potential for disproportionate effects on a nearby minority or low-income population.

Under the No Project Alternative, Shell's lease would not be renewed and the existing Shell Terminal would be subsequently decommissioned with its components abandoned in place, removed, or a combination thereof. The decommissioning of the Shell Terminal would follow an Abandonment and Restoration Plan as described in Section 3.3.1, No Project Alternative.

Under the No Project Alternative, alternative means of crude oil / product transportation would need to be in place prior to decommissioning of the Shell Terminal, or the operation of the Shell Refinery would cease production, at least temporarily. It is more likely, however, that under the No Project Alternative, Shell would pursue alternative means of traditional crude oil transportation, such as a pipeline transportation, or use of a different marine terminal. Accordingly, this Draft EIR describes and analyzes the potential environmental impacts of these alternatives. For the purposes of this Draft EIR, it has been assumed that the No Project Alternative would result in a decommissioning schedule that would consider implementation of one of the described transportation alternatives. Any future crude oil or product transportation alternative would be the subject of a subsequent application to the CSLC and other agencies having jurisdiction, depending on the proposed alternative.

With no lease, and after decommissioning, there would be no potential for tanker spills at the Shell Terminal. As with the proposed Project, the Shell Terminal area of potential impact does not include an area identified as an MTC-Minority Zone and Area of Poverty, or an area of Meaningfully Greater Minority or Low-Income Population; therefore, the No Project Alternative would have no Environmental Justice impact.

The No Project Alternative assumes the number of tankers servicing the area would remain essentially the same due to regional demands, and assumes that with no Shell Terminal, incoming tankers would go to other nearby terminals that may or may not require expansion. Impacts may occur in water quality, biological, and commercial and sport fisheries impacts near the other terminals, and any environmental justice effects would be specifically dependent upon the location of the nearby and the demographics of the communities surrounding each terminal.

Impact EJ-3: Full Throughput Alternative

Tankers would use other Bay area marine oil terminals, which would shift impacts to those facilities. Modified and new pipeline(s) would be required to transfer crude oil and products to the Shell Refinery. New pipelines may have a disproportionate effect on minority, Hispanic Origin, and low-income populations.

Under this alternative, impacts would be transferred to other Bay area terminals for vessel loading/unloading. In addition, this alternative entails the use of pipelines in the area for the transport of petroleum products from those terminals to the Shell Refinery. The disproportionate effect of other significant adverse impacts associated with this alternative would be dependent upon the location of each terminal, the number of tankers and the demographics of the communities surrounding that terminal.

As identified in impact EJ-1, Table 4.12-4, the study area census groups have minority, Hispanic Origin, and low-income populations. Installation of new and modifications to existing pipelines would entail alignments through communities that have high concentrations of minority, Hispanic Origin, and low-income populations, not only in the city of Martinez, but also through other communities between the Shell Refinery and most of the locations of other Bay area terminals. Therefore, depending upon the pipeline's alignment, significant adverse impacts (Class I and II) associated with this alternative may have a disproportionate effect on low-income populations located within the city of Martinez and other low income communities through which new pipelines may pass. Effects for construction may include easement acquisitions, and operational effects would be due to oil spills risks and the potential for impacting local resources along the pipeline route.

Mitigation Measures for EJ-3:**EJ-3.** Implementation of MM BIO-9 and MM GEO-8.

Rationale for mitigation: Planning for protection of sensitive resources and providing public information would help to avoid or provide rapid response to spill events (MM BIO-9). Even so, spills can impact land based waters, biota, land uses, recreational uses, and fisheries. Impacts can be mitigated to less than significant for small spills with rapid containment and cleanup. By providing proper engineering, inspection, maintenance and retrofitting (MM GEO-8), the potential for pipeline failure and therefore, disproportionate impact to the local community can be reduced to less than significant.

Residual Impact: Residual disproportionate effects from large spills on minority, Hispanic Origin, and low-income populations could remain for land based waters, biota, land uses, recreational uses, and fisheries.

4.12.6 Cumulative Projects Impacts Analysis**Impact CUM-EJ-1: Impacts to Minority or Disadvantaged Communities**

Cumulative projects may have the potential to disproportionately affect localized minority or disadvantaged communities. Shell Terminal's operation does not contribute to this impact.

The cumulative projects are likely located in areas containing some amount of minority or disadvantaged communities. For most of the cumulative projects, impacts on minority or disadvantaged communities are not expected since most of the projects are water-based. For long-term land-based projects over the 30-year lease period, it is likely that new construction or modification of existing land-based projects could result in temporary or permanent impacts that may result in environmental justice impacts if a business is moved or disrupted or if the new use would create a noise or traffic impact. The Shell Terminal does not contribute to this impact.

As similar to the proposed Project, the cumulative projects combined can be expected to have cumulative impacts to biota, commercial and sport fisheries, land use, and visual resources, due to impacts related to tanker and pipeline spills. Mitigation for cumulative environmental justice impacts must involve evaluation of each project individually and then address their contribution to the cumulative environment.

A summary of the impacts and mitigation measures is provided in Table 4.12-5.

**Table 4.12-5
Summary of Environmental Justice Impacts and Mitigation Measures**

Impacts	Mitigation Measures
EJ-1: Continued Operation of the Shell Terminal	EJ-1: Should an oil spill from the Shell Terminal extend beyond 0.5 mile from the Shell Terminal and preclude subsistence fishing by members of minority and/or low income communities for more than two days, Shell shall contribute either funds or food stuffs to a local food bank in an amount sufficient, as determined in conjunction with the California State Lands Commission, to replace food sources that would have been supplied by fishing activities within the affected areas.
EJ-2: No Project Alternative	EJ-2: No mitigation required.
EJ-3: Full Throughput Alternative	EJ-3: Implementation of MM BIO-9 for contingency planning for sensitive biota resources, and MM GEO-8 for pipeline integrity during construction and operation.
CUM-EJ-1: Impacts to Minority or Disadvantaged Communities	CUM-EJ-1: No mitigation required.

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